Ham-Digital Digest   Tue, 5 Oct 93   Volume 93 : Issue   64

Today's Topics:
                 AX.25 protocol with Linux? (2 msgs)
                   BAYCOM does not run under OS/2
                        Baycom Modem Problem
                             BPQ 4.06k
                    DVR4-10's @ 450mhz (2 msgs)
         jnos109, node arp/route suggestions, please (2 msgs)
                        MacTCP radio driver?
            MFJ-1278 Multi Mode Data Controller for sale
      New DX-cluster software project, asking volunteers to help.
                         Responsibility for B

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 4 Oct 1993 14:41:13 +0200
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!pipex!sunic!news.funet.fi!
news.tele.fi!juha.fi!juha.fi!not-for-mail@network.ucsd.edu
Subject: AX.25 protocol with Linux?
To: ham-digital@ucsd.edu

Does there exist any support for AX.25 packet radio protocol in Linux?

(Linux is freely-available x86 (x >= 3) *nix - lookalike.)

Is this support in the form of add-on or what?

If there is support for AX.25, what is the needed hardware?

Anything else I should know?

(I know that it is possible to use linux machine with standard TNC and serial
line but I am searching something better, eg. how to connect multiple users
thru one serial port.)

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- Riku "the bit" Kalinen, Suomen Tietoverkkopalvelu Oy
- Ham: OH2LWO (>= 50MHz)
- X.400: G=Riku;S=Kalinen;O=juha;P=juha;A=mailnet;C=fi
- "Always choose a bigger enemy, because it's easier to hit." -Terry Pratchett

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Date: 4 Oct 93 14:11:12 GMT
From: newsgate.watson.ibm.com!hawnews.watson.ibm.com!news@uunet.uu.net
Subject: AX.25 protocol with Linux?
To: ham-digital@ucsd.edu

In <28p5l9$1af@juha.fi>, riku@juha.fi (Riku Kalinen) writes:
>Does there exist any support for AX.25 packet radio protocol in Linux?

    Check out the NOS-BBS@HYDRA.CARLETON.CA mailing list. There's a guy there
who's ported JNOS to Linux. It has multi user, AX.25 support along with the
standard TCP/IP stuff. I haven't tried it out, but several people have.
    There's also something call WAMPES. I think that there's a Linux version
for that too. Look for it on UCSD.EDU in the ham-radio TCP/IP directories.

73's de Jack - kf5mg
AX25net   - kf5mg@kf5mg.#dfw.tx.usa.na - (817) 962-4409
Internet   - kf5mg@kf5mg.ampr.org   - 44.28.0.14
Worknet   - kf5mg@vnet.ibm.com

Date: 4 Oct 93 17:06:42 GMT
From: ogicse!uwm.edu!spool.mu.edu!howland.reston.ans.net!vixen.cso.uiuc.edu!
usenet@network.ucsd.edu
Subject: BAYCOM does not run under OS/2
To: ham-digital@ucsd.edu

In <9310011949.AA04499@ucsd.edu>
William=E.=Newkirk%Pubs%GenAv.Mlb@ns14.cca.CR.rockwell.COM writes:
>>I can't get BAYCOM to run under OS/2. I tried many options in the DOS

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>>window. Under OS/2, BAYCOM never receives any packet, and it
>>terminates due to illegal instruction
>>I prefer to run BAYCOM under OS/2 because the computer is not tied
>>up.
>>Ignacy Misztal, NO9E, SP8FWB
>
>didja try the VMB method also (dos image boot) or just OS/2 in VDM (OS/2
>emulates DOS) method?  i've got a couple of things (old sony cd-rom, and 1
>program) that work better under a DOS image than under OS/2's "DOS session".
>
>bill wb9ivr
Many replies to my original posts suggest that BAYCOM depends on
accurate timing and that OS/2 cannot secure this. I will check the
VMB, though.

------------------------------------------------------------------------------
Ignacy Misztal                 Ham radio: NO9E, SP8FWB
Internet: ignacy@uiuc.edu      Bitnet: ignacy@uiucvmd.bitnet
University Of Illinois         1207 W. Gregory Dr., Urbana, IL 61801, USA
tel. (217) 244-3164            Fax: (217) 333-8286

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Date: 4 Oct 93 15:46:16 GMT
From: agate!howland.reston.ans.net!sol.ctr.columbia.edu!jabba.ess.harris.com!
mlb.semi.harris.com!controls.ccd.harris.com!drs@ucbvax.berkeley.edu
Subject: Baycom Modem Problem
To: ham-digital@ucsd.edu

I have a Baycom modem that I built myself and have successfully use on a
couple of local BBS fine. No problems noticed. When I try to connect to
the local MARS BBS  I cannot successfully connect. It appears as though
I send a connect request, the other station sees it and responds with
a request for my name, addr etc. BUT, the Baycom doesnt see it. I can see
the activity in the lower window, but my Baycom software misses it.
Now is it possible that the other station responded before I was ready to
receive? I'm using an old PC XT. I think the other station is using a
486 machine. Is there a parameter I can change for this? Or am I stuck
with a slow computer? Or?

Doug, N4IJ

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Date: Mon, 4 Oct 1993 19:59:54 +0000
From: news.sprintlink.net!demon!llondel.demon.co.uk!dave@uunet.uu.net
Subject: BPQ 4.06k
To: ham-digital@ucsd.edu
```

Dave
--


```
********************************************************************************
* G4WRW @ GB7WRW.#41.GBR.EU AX25     *     Start at the beginning. Go on    *
* dave@llondel.demon.co.uk  Internet *     until the end. Then stop.         *
* g4wrw@g4wrw.ampr.org      Amprnet  *      (the king to the white rabbit)  *
********************************************************************************
```

Date: 4 Oct 93 09:54:24 CDT
From: equalizer!timbuk.cray.com!hemlock.cray.com!andyw@network.ucsd.edu
Subject: DVR4-10's @ 450mhz
To: ham-digital@ucsd.edu

In article <9310020032.AA07674@ingersoll.com>, dewaldz@ingersoll.COM (Dave Ewaldz)
writes:
> We are in the process of setting up a local 9600 backbone link on 70cm here,
> and one of the participants has purchased a Kantronics D4-10 radio for his end.
> The link is on 440.050 mhz. The Kantronics manual leads one to believe these
> radios can't go this high in frequency. Anyone have any luck with these rascals
> above 440mhz?

Some are running on 449 in the Twin Cities, apart from the
usual drifting, and maybe some deafness, they work.
--
andyw   N0REN/G1XRL

andyw@aspen.cray.com   Andy Warner, Cray Research, Inc. (612) 683-5835

Date: Mon, 4 Oct 1993 14:24:07 GMT
From: ncrgw2.ncr.com!ncrhub2!law7!cn292.DaytonOH.NCR.COM.25.149.IN-ADDR.AR\ı!
jra@uunet.uu.net
Subject: DVR4-10's @ 450mhz
To: ham-digital@ucsd.edu

In article <9310020032.AA07674@ingersoll.com> dewaldz@ingersoll.COM (Dave Ewaldz)
writes:

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>The link is on 440.050 mhz. The Kantronics manual leads one to believe these
>radios can't go this high in frequency. Anyone have any luck with these rascals
>above 440mhz?

>Any feedback would be appreciated.

I haven't tried moving a D4 up to 450, but I don't think it would be a problem
-- the RF circuits are pretty wide. We're running D4s at 420.xx and 430.xx,
and find that very little retuning is required to move 10MHz -- in fact, a
radio tuned for 430 will work pretty well at 420 with no retuning at all
(except for tweaking the VCO pots per the manual).

John

Date: Sun, 3 Oct 1993 19:15:56 GMT
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!torn!nott!cunews!revcan!rubicon!
uuisis!ve3ppe!znha@network.ucsd.edu
Subject: jnos109, node arp/route suggestions, please
To: ham-digital@ucsd.edu

I'm seeking net.wisdom, particularly in the area of jnos configuration.

The setup consists of jnos109n on a pc-at, mfj tnc and radio. Boots up
fine, all that. Now I need to work through the local TheNet X1H node to work
the local MSYS bbs (see .sig below). I can "c iface" "node" and then
connect on to the bbs. I can "netrom connect" bbs and that works too.
So af/if/rf issues are out. Virtual circuit works fine, netrom works fine.

The issue is what to put in the arp and route table. Without them (there's
little in them now except broadcast and the occasional default) tcp layer
programs don't work (telnet, ftp, finger, snmp).

If I put the default route as myself, and the arp bbs ax25 iface, I can
trace jnos putting out requests into the air. But, of course the bbs
can't hear me--I need to go through the node.

If I put the default route as the node, and the arp node ax25 iface, I
can see the node responding. (Not that it ever shows in the arp table...) But
the node is merely giving me back it's address. (Too much time--several
hours--fiddling with this, sri if not percisely correct on sequence and
events. Bottom line is tcp never worked.)

JNOS (or even X1H, for that matter) suggestions, please.

Thanks, Gord.
znha@ve3ppe.isis.org (internet) ve3ppe@ve3osq.#eon.ca.na (packet)

Date: 4 Oct 93 14:06:37 GMT
From: newsgate.watson.ibm.com!hawnews.watson.ibm.com!news@uunet.uu.net
Subject: jnos109, node arp/route suggestions, please
To: ham-digital@ucsd.edu

In <CEC5IK.EI5@ve3ppe.isis.org>, znha@ve3ppe.isis.org (Gordon Dey) writes:
>I'm seeking net.wisdom, particularly in the area of jnos configuration.
>
>The setup consists of jnos109n on a pc-at, mfj tnc and radio. Boots up
>fine, all that. Now I need to work through the local TheNet X1H node to work
>the local MSYS bbs (see .sig below). I can "c iface" "node" and then
>connect on to the bbs. I can "netrom connect" bbs and that works too.
>So af/if/rf issues are out. Virtual circuit works fine, netrom works fine.

   Two Items. Have you done anything with the AX25 Route command? We don't
have any netrom nodes around here, so I don't know if JNOS to MYSYS via Netrom
would work differently than JNOS to MYSYS via digi or not. But to use a
digi, you set up an AX25 ROUTE command that uses the digi in addition to
the Route commands. We don't set any arp commands and let the system take care
of that. The Route command doesn't have to know anything about the digi. The
AX25 Route command is the only thing that worries about the digi.
   More importantly.... how come the X1H node is not running the IP router
code? If it is, you won't need to worry about NET/ROM at all. Just set up your
Route to the MYSYS box to go via the X1H IP node. If the X1H node is running
the IP code and has an address of 44.28.14.14 and the MYSYS node is using
44.28.14.21 and your TNC portname is called TCPIP, your route to the MYSYS
station would be
ROUTE ADD 44.28.14.21 TCPIP 44.28.14.14
or something like that. That's the way to go with X1H IP routers. You don't
need NET/ROM at all. We get along just fine without it. :)

73's de Jack - kf5mg
AX25net   - kf5mg@kf5mg.#dfw.tx.usa.na - (817) 962-4409
Internet   - kf5mg@kf5mg.ampr.org   - 44.28.0.14
Worknet   - kf5mg@vnet.ibm.com

Date: 04 Oct 1993 15:46:31 GMT
From: swrinde!cs.utexas.edu!usc!sol.ctr.columbia.edu!hamblin.math.byu.edu!hamblin!
emery@network.ucsd.edu
Subject: MacTCP radio driver?
To: ham-digital@ucsd.edu

On Sat, 2 Oct 1993 16:11:03 GMT, gary@ke4zv.atl.ga.us (Gary Coffman) said:

> In article <1993Oct1.033319.10927@news.yale.edu> ewing@cis.yale.edu (Martin
Ewing) writes:

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>>It seems that one approach to Macintosh tcp/ip radio would be to
>>do away with ka9q (Net/Mac, not the person :-) and use the standard
>>MacTCP network package that we use on Ethernet or LocalTalk.  One
>>would need a driver to tell it about AX.25.  After you had that, you
>>could use NCSA Telnet, and various other PD Mac packages.
>>
>>Has anyone done this or looked into it?


> There's a problem with using native TCP/IP for this purpose. You
> can't set the parameters to avoid sending a packet storm on
> connection attempts. The timing will be for ethernet or localtalk
> rather than for a AX25 radio link.

Yes, that's a good point but I think that if the MacTCP driver were
rewritten for use on packet radio, those parameters could be incorporated
into it.  I did read somewhere that someone was working on this.  Does
anyone know who it is?

>That's why most people use a cheap dos box running KA9Q as a intermediate
>router. It can confine the packet storm to the ethernet by appropriate setting
>of parameters.

Finally, a good use for a PC :-)

> Gary


> --
> Gary Coffman KE4ZV           |"If 10% is good enough | gatech!wa4mei!ke4zv!gary
> Destructive Testing Systems | for Jesus, it's good  | uunet!rsiatl!ke4zv!gary
> 534 Shannon Way             | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
> Lawrenceville, GA 30244     | -Ray Stevens          |

Emery, KB7TER

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Date: 5 Oct 93 17:40:38 +1300
From: swrinde!cs.utexas.edu!wupost!waikato!waikato.ac.nz!barhodes@network.ucsd.edu
Subject: MFJ-1278 Multi Mode Data Controller for sale
To: ham-digital@ucsd.edu

I have an MFJ-1278 PACKET modem for sale handles packet, rtty, weefax, amtor
etc, fitted with MFJ-2400 Board complete with MFJ-1284 Software disk (original)
NZ$ 650 ono

cheerez

Brucee , Zl1ubr
```

Date: 4 Oct 1993 15:07:07 +0200
From: agate!howland.reston.ans.net!pipex!sunic!news.funet.fi!news.tele.fi!juha.fi!
juha.fi!not-for-mail@ames.arpa
Subject: New DX-cluster software project, asking volunteers to help.
To: ham-digital@ucsd.edu

Hello netlanders,

I am setting up a project to create {newer,cooler,better} DX-cluster software.

So far I have got the following ideas about this project:

1)   MSDOS is hardly optimal operating system to put this kind of multiuser
     system on. I think that using something like Linux or NetBSD would
     lead to better results. Possibly POSIX would be suitable software base
     to build on.

2)   The new system should be compatible with existing ones. Minimum
     requirement would be that the cluster could talk with existing ones
     using the same protocol. User-visible changes should not be too big.

3)   We (OH-land) use DX-clusters also in amateur radio volunteer rescue
     services (like RACES in US), and there are certain things that
     existing software can not do, therefore the need to start this kind of
     project in first place.

4)   The software should be non-commercial (I think that GPL would be
     excellent lisence to distribute the software).

5)   The software should be built on top of widely-used tools (like C,
     Perl, others..), and it should be well-documented, easily extensible
     and modifiable.

6)   Software distribution should be in source form.

What is needed right now is skilled manpower to think out and make
specifications for the new system.

If You think that You could give something to this project, please drop email
to riku.kalinen@juha.fi.

--
- Riku "the bit" Kalinen, Suomen Tietoverkkopalvelu Oy

- Ham: OH2LWO (>= 50MHz)
- X.400: G=Riku;S=Kalinen;O=juha;P=juha;A=mailnet;C=fi
- "Always choose a bigger enemy, because it's easier to hit." -Terry Pratchett

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Date: Mon, 4 Oct 1993 22:05:22 GMT
From: news.crd.ge.com!dssv01!kennykb@uunet.uu.net
Subject: Responsibility for B
To: ham-digital@ucsd.edu

In article <749500213.AA00140@afarm.uucp> Burt Kaufman
 <Burt.Kaufman@f40.n382.z1.fidonet.org> writes:
|> Okay. But how is the first forwarder supposed to know whether or
|> not the call sign was faked? How will this help?

How about, `I know what stations are authorized to communicate with my
system. I require cryptographic authentication (public key signature)
for all forwarded traffic for which I am first forwarder.'

And yes, crypto authentication on ham traffic IS legal; Part 97
citation on request.

73 de ke9tv/2, Kevin KENNY GE Corporate R&D, Niskayuna, New York, USA
GCS/E d++(--) -p+ c++ !l u+(---) e--- m++(*) n+ h--- f+ s+/+ g+++ w+ t r@ y+

Date: 5 Oct 1993 01:53:44 GMT
From: juniper.almaden.ibm.com!enge.almaden.ibm.com!enge@uunet.uu.net
To: ham-digital@ucsd.edu

References <749500213.AA00140@afarm.uucp>, <D>, <CEE80y.7vE@crdnns.crd.ge.com>com
Subject : Re: Responsibility for B

In article <CEE80y.7vE@crdnns.crd.ge.com>,
Kevin B. Kenny <kennykb@crd.ge.com> wrote:
>
>In article <749500213.AA00140@afarm.uucp> Burt Kaufman
> <Burt.Kaufman@f40.n382.z1.fidonet.org> writes:
>|> Okay. But how is the first forwarder supposed to know whether or
>|> not the call sign was faked? How will this help?
>
>How about, `I know what stations are authorized to communicate with my
>system. I require cryptographic authentication (public key signature)
>for all forwarded traffic for which I am first forwarder.'
>
>And yes, crypto authentication on ham traffic IS legal; Part 97

>citation on request.
>
>73 de ke9tv/2, Kevin KENNY   GE Corporate R&D, Niskayuna, New York, USA
>GCS/E d++(--) -p+ c++ !l u+(---) e--- m++(*) n+ h--- f+ s+/+ g+++ w+ t r@ y+

Crypto authorization is NOT required. Latest versions of AA4RE beta
include authorization using MD5. MD5 is useful because it is not
considered encryption since it is a one-way transformation. You can
also use the challenge/response system of randomly selecting some
characters from a "secret". AA4RE BBS also offers this as an option.

Roy Engehausen, AA4RE
enge@almaden.ibm.com

End of Ham-Digital Digest V93 #64
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